

X(4360) $I^G(J^{PC}) = ?^?(1^{--})$

OMITTED FROM SUMMARY TABLE

Seen in radiative return from $e^+ e^-$ collisions at $\sqrt{s} = 9.54\text{--}10.58$ GeV by AUBERT 07S and WANG 07D. See also the review under the $X(3872)$ particle listings. (See the index for the page number.)

X(4360) MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
4361± 9±9	¹ WANG 07D	BELL	$10.58 \text{ } e^+ e^- \rightarrow \gamma \pi^+ \pi^- \psi(2S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
4324±24	² AUBERT 07S	BABR	$10.58 \text{ } e^+ e^- \rightarrow \gamma \pi^+ \pi^- \psi(2S)$
1 From a two-resonance fit. 2 From a single-resonance fit. Systematic errors not estimated.			

X(4360) WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
74±15±10	³ WANG 07D	BELL	$10.58 \text{ } e^+ e^- \rightarrow \gamma \pi^+ \pi^- \psi(2S)$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
172±33	⁴ AUBERT 07S	BABR	$10.58 \text{ } e^+ e^- \rightarrow \gamma \pi^+ \pi^- \psi(2S)$
3 From a two-resonance fit. 4 From a single-resonance fit. Systematic errors not estimated.			

X(4360) DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \text{ } e^+ e^-$	
$\Gamma_2 \text{ } \psi(2S) \pi^+ \pi^-$	seen

X(4360) $\Gamma(i)\Gamma(e^+e^-)/\Gamma(\text{total})$

$\Gamma(\psi(2S)\pi^+\pi^-) \times \Gamma(e^+e^-)/\Gamma_{\text{total}}$	$\Gamma_2\Gamma_1/\Gamma$		
VALUE (eV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
10.4±1.7±1.5	⁵ WANG 07D	BELL	$10.58 \text{ } e^+ e^- \rightarrow \gamma \pi^+ \pi^- \psi(2S)$
11.8±1.8±1.4	⁶ WANG 07D	BELL	$10.58 \text{ } e^+ e^- \rightarrow \gamma \pi^+ \pi^- \psi(2S)$
5 Solution I of two equivalent solutions in a fit using two interfering resonances. 6 Solution II of two equivalent solutions in a fit using two interfering resonances.			

X(4360) REFERENCES

AUBERT WANG	07S 07D	PRL 98 212001 PRL 99 142002	B. Aubert <i>et al.</i> X.-L. Wang <i>et al.</i>	(BABAR Collab.) (BELLE Collab.)
----------------	------------	--------------------------------	---	------------------------------------

———— OTHER RELATED PAPERS ——

DING 08 PR D77 014033
KALASHNIK... 08 PR D77 054025

G.-J. Ding, J.-J. Zhu, M.-L. Yan
Yu.S. Kalashnikova, A.V. Nefediev
